Proposed modifications to RM-9208, low-power broadcasting

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I. Introduction

As is evidenced by the corporate buyout of commercial stations across the country and by the hundreds of unlicensed broadcasters that have erupted in the past six years, there is a great need for a low-power radio service. Currently, a petition for low-power broadcasting is before the FCC, RM-9208.

Although I support RM-9208 in theory, I believe that it will not work, as it is currently written. The first problem is that it calls for a single channel on the AM and FM broadcast bands for low-power broadcasting. In many markets, the broadcasting bands are already crowded. In those locations, it would be impossible to accommodate the low-power frequencies. Also, it would require a massive restructuring across the country, which would be very costly and would be strongly opposed by the currently licensed broadcasters.

The second major problem with the current version of RM-9208 is that it only provides 1 watt of output power with a maximum antenna height of 50 feet. Such restrictions would make low-power broadcasting totally ineffective in rural markets. As a result, great effort and expense would go into the creation of radio frequencies that benefit very few.

I strongly believe that low-power broadcasting is necessary, but that the transition should be easy and that the low-power stations should be capable of wide coverage.

II. Bands

Rather than choose sought-after frequencies, this proposed modification to RM-9208 primarily uses currently useless frequencies. The longwave band of 150 to 280 kHz is currently used for high-power longwave broadcasting in Europe and Asia. It is currently unused in North America and the 300 watts maximum output power would not interfere with the operations in Europe and Asia.

Nearly identical situations occur on 2300-2490 kHz and 25900-26100 kHz. The former is the 120-meter "tropical" broadcasting band, where stations are active from Australia,

South and Central America, and Africa. It is unused in North America and few stations from outside the continent can be heard here. With 100 watts AM, it would be difficult to hear stations outside of North America. 25900-26100 kHz is part of an International broadcasting band that is primarily only used during the peak of the sunspot cycle. Currently, no stations are operating in this range, from anywhere in the world.

The frequency range that will be available from Channel 60 to 69 is sought after. Some of it has already been given to the public-safety area. However, many have complained that part of this spectrum should be given to low-power broadcasting. This would be a prefect opportunity.

1. **Longwave 150-280 kHz**, 10-kHz spacing, 14 channels, 300 watts, AM modulation, no antenna restrictions.
2. **Shortwave 2300-2490 kHz**, 5-kHz spacing, 38 channels, 100 watts, AM modulation, no antenna restrictions.
2a. Alternate to 2300-2400 kHz: **1700-1790 kHz**, 9 channels, 50 watts, AM modulation, no antenna restrictions.
3. **Shortwave 25900-26100 kHz**, 5-kHz spacing, 40 channels, 100 watts, AM modulation, no antenna restrictions.
4. **UHF radio, 2 MHz from the reclaimed Channel 60-69 area**, 200-kHz spacing, 10 channels, 100 watts, FM modulation, no antenna restrictions.
5. **UHF TV, 6 MHz from the reclaimed Channel 60-69 area**, 1 channel, 200 watts, NTSC standard, no antenna restrictions.

III. Licensing requirements

1. All low-power stations would be required to have an FCC license, to prevent the situation that occurred on the Citizen's Band in the 1960s and 1970s.
2. The licensing fees should be held to less than $300 to allow inexpensive ownership.
3. Stations could only be owned by U.S. citizens who do not own or hold an administrative position with any other licensed broadcasting stations. If an owner of a low-power station would buy or achieve an administrative position on a licensed, standard broadcast station, they would have to relinquish their low-power licenses.
4. A person or company could own as many as three different low-power stations in any part of the country, but each would have to be on a different low-power frequency band.
5. A low-power radio station would have to broadcast successfully for two years before being licensed on the low-power TV channel.

IV. Programming requirements

1. Programming could be either commercial or noncommercial.
2. At least 50% of the programming would have to originate locally.
3. The station would have to broadcast at least 10 hours per week, except when fixing technical problems.
4. Although low-power stations could simulcast programming, these stations would not be permitted to simulcast programming from other licensed broadcasters.

V. Technical requirements

1. Non-type accepted equipment would be permitted, but stations could be temporarily removed from the air to fix such problems as harmonics, drifting, and modulation.
2. Towers would be subject to FCC, community, and FAA regulations.

VI. Listenership

One problem with the modifications to RM-9208 presented here are that the low-power frequencies are all outside of the traditional broadcasting bands. I believe that this might be a positive development. Rather than attracting "get-rich quick" schemers, it should draw those with a true interest in broadcasting and programming. Also, because the frequencies are far from important, licensed areas, it would allow non-type accepted equipment to be used. Although some might view the licensing as extra competition, some organizations, such as the NAB, should be pleased to remove the unlicensed stations from the AM and FM broadcast bands.

Finally, unlicensed radio stations have claimed for years that the programming from commercial stations is not in the public interest. If this is true, listeners will follow the stations to the new bands.